



## Preliminary program

### Wednesday, October 16, 2024

- 13:00-13:30 Registration  
13:30-14:00 Welcome and opening remarks

#### HPV/mRNA vaccine

- 14:00 - 14:45 Title TBD\*  
Luiz Zerbini, ICGEB (South Africa)
- 14:45 - 15:30 mRNA Vaccines for the Treatment of HPV-Induced Tumors  
Jamilé Ramos Silva, Imunotera (Brazil)
- 15:30 - 16:00 Human Papillomavirus E7: Novel targets for therapeutic intervention  
Lawrence Banks, ICGEB (Italy)
- 16:00 - 16:30 Coffee break
- 16:30 - 17:15 Therapeutic cell-based vaccines against tumors induced by HPV: experimental and clinical efficacy evidences  
Luis Carlos Souza Ferreira, ICB-USP (Brazil)
- 17:15 - 18:00 Prophylaxis of tumors induced by HPV  
Luisa Villa, ICESP (Brazil)

### Thursday, October 17, 2024

#### CAR T/NK cells for cancer immunotherapy

- 8:30 - 9:15 CAR-T cell initiatives at the Brazilian National Cancer Institute  
Martin Bonamino<sup>#</sup>, INCA (Brazil)
- 9:15 - 10:00 Manufacturing Challenges in CAR-T/NK Therapies: Ribeirao Preto Experience  
Virginia Picanço e Castro<sup>#</sup>, FMRP (Brazil)
- 10:00 - 10:45 Keynote lecture: Genome editing of T lymphocytes for cancer immunotherapy  
Chiara Bonini<sup>#</sup>, HSR (Italy)
- 10:45 - 11:15 Coffee break (posters)

#### Bringing novel approaches into the fold

- 11:15 - 12:00 Regulatory aspects of advanced therapies in Brazil  
Renata Parca<sup>#</sup>, ANVISA (Brazil)

- 12:00 - 12:45 Keynote lecture: Oncolytic viruses for Pediatric Brain Tumors; From the Bench to the Bedside  
Marta Alonso<sup>#</sup>, Navarra University Clinic (Spain)
- 12:45 - 13:45 Lunch (posters)
- 13:45 - 14:15 Sartorius Presentation
- 14:15 - 15:15 Oral Abstracts: Session
- Optical and electrochemical diagnosis using an epigenetic biomarker of breast cancer  
Marlone Love Tchouptang Njiyip et al (Cameroon/Brazil)
- WT1-5 rotavirus infects and induces death of tumor cells *in vitro* and *in vivo*  
Haceneh Shantall Prieto Rodríguez et al (Colombia)
- Development of a platform for gamma-delta T cell expansion and evaluation of cytotoxicity against tumor cells  
Mateus da Silva Matias Antunes et al (Brazil)
- TCR-depleted anti-GD2 'universal' CAR-T allogeneic product exerts antitumoral activity against glioblastoma cells *in vitro*  
Karolina Santos Esteves et al (Brazil)
- 15:15 – 15:45 Co-Expression of cJUN Enhances CRISPR Knock-In anti-B7H3 CAR T-cell Function for Small Cell Lung Cancer Treatment  
Hyatt Balke-Want, MaxCyte (Germany)
- 15:45 - 16:15 Coffee break (posters)
- Oncolytic approaches for cancer immunotherapy**
- 16:15 - 17:00 Switching the balance between immune tolerance and surveillance to enhance antitumor response  
Marcio C Bajgelman, LNBio (Brazil)
- 17:00 – 17:45 The difficult path to the clinic of a tumor stroma-targeted, TME-responsive, oncolytic virus  
Osvaldo Podhajcer<sup>#</sup>, Instituto Leloir (Argentina)
- 17:45 - 18:30 Oncolysis in response to gene transfer  
Bryan Strauss, ICESP (Brazil)

## Friday, October 18, 2024

### Non-coding RNA in cancer theranostics

- 8:30 - 9:15 Title TBD  
Edna Teruko Kimura, ICB-USP (Brazil)
- 9:15 - 10:00 microRNAs associated with metastasis  
Patricia Pintor dos Reis, UNESP (Brazil)
- 10:00 - 10:45 Keynote lecture: Living in the World of RNA Medicine  
Muthiah Manoharan, Alnylam Pharmaceuticals, Cambridge, MA (USA)
- 10:45 - 11:15 Coffee break (posters)

### **Dynamic platforms for cancer therapy and diagnosis: I**

- 11:15 - 12:00 Introduction to RNA nano design tools  
Kirill Afonin, UNCC (USA)
- 12:00 - 12:45 Immunological Properties of Nanocarriers and Nanoparticle-formulated Products: Lessons Learned from Two Decades of Preclinical Characterization at the Nanotechnology Characterization Lab  
Marina Dobrovolskaia<sup>#</sup>, NIH (USA)
- 12:45 - 13:45 Lunch (posters)
- 13:45 – 14:00 Promega Presentation
- 14:00- 15:00 Oral Abstracts: Session II
- Cell membrane-functionalized nanoparticles containing imatinib for chronic myeloid leukemia therapy  
Flávia Langellotti Silva et al (Brazil)
- Enhancing Raman spectroscopy for improved characterization of extracellular vesicles in cancer biology  
Marco Lazaro de Sousa Batista et al (Brazil)
- Tailoring Amphiphilic Nanocarriers from Low Molecular Weight Chitosan for Effective Gene Therapy  
Gabriel José De Carli et al (Brazil)
- Down-modulation of MHC-I in tumor cells by bacterial RNA: a possible therapeutic strategy  
Agustina Serafino et al (Argentina)
- 15:00 – 15:30 Sartorius Presentation
- 15:30 - 16:00 Coffee break (posters)

### **Dynamic platforms for cancer therapy and diagnosis: II**

- 16:00 – 16:45 Immunostimulatory Nucleic Acid Nanoparticles (NANPs) for Biomedical Applications  
Afonin Kirill, UNCC (USA)
- 16:45 – 17:30 The Nanomedicine Revolution: Advances in Diagnosis and Therapy  
Valtencir Zucolotto, USP IFSC (Brazil)
- 17:30 – 18:15 Keynote lecture: NanoComputing Agents: Hacking Cellular Behavior  
Nikolay Dokholyan, Penn State College of Medicine (USA)

## **Saturday, October 19, 2024**

### **Hitting the target using nanobiosystems**

- 8:30 – 9:15 Introduction to and use of extracellular vesicles  
Luciana Andrade, ICESP (Brazil)
- 9:15 - 10:00 Title TBD  
Maria Vitória Lopes Badra Bentley, FCFRP (Brazil)
- 10:00 – 10:30 Cytiva Presentation
- 10:30 - 11:00 Coffee break
- 11:00 - 11:45 Targeting mechanisms of cancer treatment resistance with miRNAs and nanostructures RNAs

- Roger Chammas, ICESSP (Brazil)
- 11:45 - 12:30 Keynote lecture: Bioengineering extracellular vesicles as therapeutic vehicles  
Xandra Breakefield#, Harvard/Mass Gen (USA)
- 12:30 - 14:00 Celebration (social event, 23rd floor, TBD)
- 14:00 - 18:00 Laboratory mini-courses (TBD)

**\*Note: All lecture titles are provisional and will be updated as plans are finalized.  
TBD, to be determined.**

**#Note: This presentation will be made remotely.**

**Coffee breaks are included with registration. Drinks/snacks will be provided.**

**Lunches are included with registration. Meals, including vegan and gluten free options, will be provided.**